

MEMORANDUM

SUBJECT: Gulfco Marine Maintenance Lot 20 Residential Risk

FROM: Dipanjana Bhattacharya, Risk Assessor

TO: Gary Miller, Remedial Project Manager

DATE: March 7, 2011

Comments on Gulfco Marine Maintenance Lot 20 Residential Risk from Remedial Investigation Report

Please refer to the attached Table 1. Since Lot 20 changed land use from industrial/commercial to residential, the risks for contaminants of concern were recalculated.

PAHs:

Benzo (a) pyrene, benzo (a) anthracene, and dibenz (a,h) anthracene concentrations corresponded to an acceptable carcinogenic risk range (between 10^{-6} to 10^{-4}).

PCB:

Aroclor-1254 concentrations also corresponded to a carcinogenic risk in the 10^{-6} range and a non-carcinogenic hazard quotient of 0.92. Both carcinogenic risk and non-carcinogenic risks are acceptable and protective of human health for residential exposure.

Lead:

Potential Future Risk:

The lead concentrations ranged from 19 mg/kg to 985 mg/kg. The Region 6 Screening Level for residential scenario is 400 mg/kg. Among 6 samples taken from Lot 20, sample L20SB07 (985 mg/kg), exceeded the residential protective screening level. This sample was taken in the southwest corner of the lot. I recommend that the property owner be notified of this risk. If there are future construction activities on this lot, the soil in that southwest corner should be removed and properly disposed.

Data Indicating Lead may not be Related to Gulfco Site:

The site lead concentrations adjacent to the southwest corner of the lot ranged from 18 mg/kg to 290 mg/kg. The exceeding off-site concentration (985 mg/kg) is more than three times higher than the highest on-site concentration (290 mg/kg). According to pages 66 and 67 of the Remedial Investigation Report, "A review of the Lot 20 and Grid Column A data suggests the presence of an off-site contaminant source in the vicinity of sample locations L20SB06 and L20SB07, where concentrations of several COIs (particularly lead and zinc) were higher than concentrations observed in adjacent South Area samples. As shown on Figure 44, location L20SB07 is at the edge of a dry dock facility associated with the former commercial marina."